BY ORDER OF THE COMMANDER AIR FORCE MATERIEL COMMAND (AFMC)

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AIR FORCE MATERIEL COMMAND
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Flying Operations

GENERAL FLIGHT RULES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

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This supplement does not apply to the Air National Guard or US Air Force Reserve units and members.

SUMMARY OF REVISIONS

Policy guidance has changed with respect to ASRR use, fuel reserves, parachutists manifests, practice instrument approaches under visual flight rules, ACF/FCF crew duty day and extension of flight duty periods. A| indicates changed guidance.

AFI 11-202, Vol 3, 1 June 1998, is supplemented as follows:

- **1.2.3.**(Added) Submit unit supplements to HQ AFMC/DOV, 508 W. Choctawhatchee Ave, Suite 4, Eglin AFB FL 32542-5713.
- **1.3.2.**(Added) Submit unit waiver requests to HQ AFMC/DOV for approval.
- **1.6.(Added)** Send AF Forms 847 to HQ AFMC/DOV for coordination.
- **2.1.1.1.(Added) Flights to DoD and joint-use airfields within the CONUS.** For flights originating and terminating at DoD or joint-use installations within the CONUS, an ASRR review is not required.
- **2.1.1.2.**(Added) Flights to non-DoD/joint use airfields (including all overseas airfields). For flights originating or terminating at civil airfields (other than joint-use), consult both the ASRR and Global Decision Support System (GDSS) databases for additional flight planning information, airfield suitability, obstruction data, and restrictions. General ASRR restrictions (example: day only, VMC only, etc.) are applicable to all AFMC operations. Aircraft-specific restrictions apply to AFMC users of like aircraft. Where advisements are specified, contact HQ AFMC/DOV.
- **2.1.1.3.(Added) Waivers to ASRR Restrictions.** ASRR waiver authority is AFMC/DOV.
 - **2.1.2.1.**(Added) Maps and Charts. Carry sufficient maps, charts, and flight information publications (FLIP) to navigate for both the planned IFR and visual flight rule (VFR) phases of flight. The PIC must ensure the maps and charts depict applicable training, restricted, instrument, aerobatic, gunnery and jetti-

son areas, and emergency landing fields. For missions flown IFR, under Air Traffic Control (ATC), and outside of the local area, appropriate FLIP en route charts satisfy this requirement. For local flights, detailed aircrew aids that contain this information are sufficient.

- **2.1.2.2.(Added) Inflight Manuals/Directives.** The PIC will ensure that applicable flight manuals, checklists, and mission related directives (if required) for all mission required crew positions will be carried in flight. The DFO will determine required mission directives. For aircraft lacking adequate storage space, only checklists are required for each crew position.
- **2.1.4.(Added) Mission Planning Requirements.** The responsibility for mission planning is shared jointly by individual aircrews and the DFO. The DFO must ensure that a flight operations area is available with adequate space for operations management, flight planning/briefing, and required publications. The DFO will ensure that aircrews are provided the following:
 - Mission requirements and schedule of events.
 - Briefing facilities and aids described in para 2.1.5(Added)(AFMC).
 - Current FLIP products, appropriate regulations, and flight manuals (including Partial and Modification Flight Manuals) located in the unit. As a minimum, retain the following FLIP products and associated documents:
 - General Planning
 - Area Planning North and South America.
 - Other Applicable Area Planning Volumes.
 - Instrument Flight Rules (IFR) Supplement
 - Applicable Instrument Departure and Arrival Procedures.
 - Applicable Instrument Approach Volumes.
 - Applicable En Route and Navigational Charts.
 - Flight Information Handbook.
 - Aeronautical Information Manual
 - Internet access to the ASRR and GDSS databases as required in para 2.1.1
 - Communications equipment for use in obtaining weather, local airfield conditions, notices to airman (NOTAM), and filing flight plans.
 - **2.1.5.**(**Added**) Briefing Room Requirements. Briefing rooms will be private and of adequate size to seat required crewmembers. They may be multipurpose rooms, but privacy must be ensured during aircrew mission briefings. Briefing rooms will contain:
 - Visual aids (such as slide display boards, charts, briefing books, viewgraphs, etc.) to adequately present, as applicable to each unit, the following:
 - Airfield diagrams depicting runways, taxiways, parking areas, and other special use areas as appropriate (for example, arm/dearm areas, hot brake areas, jettison areas, etc.).
 - Training rules (air-to-air, air-to-ground, intercept, low level, etc.).
 - Visual aids for air refueling procedures (when appropriate).
 - Local area charts depicting:
 - Local flying area.

- VFR patterns, including entry and departure procedures.
- Special use airspace.
- Alternate airfields.
- Locally established air refueling areas/routes.
- Controlled bailout areas.
- Air-to-air, air-to-ground, FCF, jettison, drop zone or salvo areas, and supersonic areas/ranges normally used by the unit.
- A dry-erase board or suitable substitute.
- Briefing guides for applicable missions and Emergency Procedure of the Day lists.
- 2.2.3. Holding (instead of an alternate airport) is authorized for a remote or island destination when the requirements of para 8.4.3 are met.
- **2.2.3.1.(Added)** For preflight planning purposes, use the greater of 10 percent (up to a maximum of 45 minutes)/20 minutes or the command minimum landing fuel established in command MDS specific volumes or as shown below in Table 2.1.

Table 2.1. Command Minimum Fuel Reserves.

Aircraft	Pounds	Aircraft	Pounds
A-10	1,200	E-8	8,000
B-1	16,000	F-4	1,500
B-2	14,000	F-15	1,500
B-52	20,000	F-16	800
C-5	20,000	F-22	2,000
C-12	400	F-117	2,000
C-17	16,000	H-1	200
C-18	8,000	H-53	1,000
C-130	5,000	H-60	400
C-135	8,000	T-38	600
C-141	10,000	T-39	800
E-3	10,000	U-2	125 gal

- **2.2.4.1.**(Added) The DFO may permit the use of a unit-developed form, or another form published by the lead MAJCOM. Submit unit-developed forms to HQ AFMC/DOV for approval.
- **2.2.4.2.**(Added) Refer to the MDS-specific volume for approved flight planning software. AFMC crewmembers are responsible for ensuring correct entry of flight planning data.
- 2.3. When military weather service is not available or incomplete, aircrews will obtain weather by any means possible, to include foreign military, civilian Automatic Terminal Information Service, Flight Service Station, DUATS, through fixed base operators, etc.
- 2.4. Brief crewmembers from a guide that includes, as a minimum: call sign, fuel load, takeoff times, primary and alternate missions, crewmember coordination requirements, specific mission procedures, routes, ranges or restricted areas, formation procedures to include break up procedures and separation of aircraft in IMC and VMC, communications procedures, recovery and landing procedures, weather condi-

tions, training requirements, emergency and abnormal procedures, lost communications procedures, cockpit resource management (CRM) principles applicable to the sortie, specific mission/series aircraft differences (if required), and mission security. The guide will include, when applicable, a passenger and transient aircrew briefing outline, and ditching procedures for over water flights.

- 2.4.1. Requirements for passenger briefing guides are contained in the applicable MDS-specific attachment.
- 2.5.1.2.3. Portable GPS Units (PGU) may be used on AFMC aircraft when the requirements of paragraph 5.8.3.3 are met in VMC. PGUs that have passed ASC/ENAE certification testing are approved for operation during any phase of flight. Devices which have not been tested or fail certification testing are not authorized for use in AFMC aircraft in IMC.
- 2.5.1.3.1. Forward all requests to HQ AFMC/DOV for approval. The request will contain a justification for use information demonstrating compliance with the Mil Standards specified in para 2.5.1.3.1, second bullet, and the duration of the requirement.
- **2.5.4.1.**(Added) Crewmembers will not wear pins, wigs, hair pieces, ornaments, barrettes, clips, earrings, and other fasteners made of leather, plastic, or metal. Additionally, these items are prohibited for all occupants of ejection seat-equipped aircraft. Other items will be properly secured to minimize foreign object damage (FOD) risk. PICs will ensure that passengers wearing these items do not create a FOD hazard.
- **2.5.4.2.**(Added) Crewmembers will not wear finger rings while performing crew duties in or around the aircraft.
- 2.6.1.2.1. Submit endorsement requests for single medium displays to HQ AFMC/DOV for coordination.
- **2.7.(Added)** When an aircraft gas turbine compressor or auxiliary power unit is being operated during preflight or other ground operation, a person qualified in its operation must be in a position to monitor audible and/or visual warning systems.
- 3.1.2. The AFMC Form 83, **Local Flight Clearance Authorization**, may be used for local area flights that terminate at the base of departure or at an installation under the operational control of the base of departure. For flights with intermediate stops or termination at other than the base of departure, an AFMC Form 82, **Flight Authorization**, will be used and a flight plan will be filed.
- 3.3. (Added) Parachutist Manifests. All parachutists will be listed on DD Form 2131, **Passenger Manifest**, AFMC Form 56, **Parachutist Jump Schedule**. Parachutists will provide the aircrew with a copy of the manifest or AFMC Form 56, and the aircrew will file the manifest with the mission paperwork.
- 4.3.5. (Added) For flights originating and terminating away from home base, the DFO will establish local aircrew reporting procedures to ensure monitoring of local and cross-country aircraft, crew status, location, and mission status.
- 4.3.6. (Added) Proposed one-time flights of unairworthy/crash-damaged aircraft to repair facilities require HQ AFMC/DO approval. Submit requests to HQ AFMC/DOV for coordination.
- **4.7.(Added)** Aircraft Delivery. AFMC depot aircrews will accomplish pickup and delivery of aircraft to and from depot facilities to the maximum extent field unit mission requirements allow. Units within AFMC without dedicated flight training time have priority.

- **5.1.7.(Added)** Any assigned, attached, or temporary duty aircrew member involved in a Class A or B mishap will be administratively grounded by the unit commander immediately following the mishap. Any aircrew member involved in such a mishap will not perform aircrew duties in AFMC assigned aircraft until authorized in writing by AFMC/DO. Forward copies of all grounding actions to AFMC/DOV and coordinate all return to flying status actions through AFMC/DOV for AFMC/DO approval. Copies of all relative actions will be maintained in section four of affected individual's training folder.
- **5.4.3.**(Added) Formation Rejoin and Breakup. The flight lead will maintain positive control over formation rejoin and breakup, and when necessary, issue instructions to ensure safe separation of participating aircraft. During formation breakups, the flight lead will ensure each pilot has a positive fix from which to navigate (visual or instruments) and clear off aircraft/elements individually. Departing aircraft will initially turn away from the formation and, in VMC conditions, establish visual contact with previously departing aircraft/elements.
- **5.8.1.**(Added) RNAV systems installed during aircraft production or fleet-wide (TCTO) modification, conforming to the accuracy tolerances of FAA Advisory Circular 90-45A, 20-130A and 20-138, are approved for use in enroute operations. Installation and use of other RNAV systems requires coordination with the responsible air logistics center (ALC). Engineering and certification authority for testbed aircraft resides with the contractor and/or responsible test organization.
- 5.8.2. Unit DFOs may authorize the accomplishment of self-contained approaches as part of an approved test plan or FCF profile. Flight conditions will be day VMC unless the approach is TERPS-certified according to para 8.3.1.1.1, this supplement.
- 5.8.3.1.1. Mission enhancement systems, when verified against other NAVAIDs, may be used to update the INS position.
- 5.8.3.2. GPS systems installed during aircraft production or fleet-wide (TCTO) modification, conforming to the requirements and specifications of FAA TSO C-129A, C-115, C-145 and C-146, are approved for IFR use in enroute operations. Installation and use of other GPS systems requires coordination with the responsible ALC. Engineering and certification authority for testbed aircraft resides with the contractor and/or responsible test organization.
- **5.8.3.3.1.(Added)** Software developed for use with PGUs containing moving map displays requires HQ AFMC/DOV approval. Submit supporting documentation with the approval request.
- **5.8.3.3.2.**(**Added**) Units will develop a training program tailored to the specific PGU that will be used. Document training completion on the applicable AFMC Form 67 and file in Part IV of the individual's training folder.
- **5.9.5.1.(Added)** The DFO may authorize helicopters on high priority operational or test missions to operate into and from unlighted areas as long as all available terrain and obstacle information is studied and all available lighting is used. Consideration must be given for the use of parachute flares or prepositioning other forms of lighting. Running takeoffs and landings will only be made to a runway or taxiway that is clearly discernible by lights. On all other missions (training, routine operational, or test missions, etc.), landings into remote and operational sites between official sunset and official sunrise are permitted only under the following conditions:
 - The area is outlined by discernible lights or parachute flares.
 - The pilot is familiar with the landing area through review of the site folder, as a minimum, and accomplish a daytime landing or overflight if feasible.

- The mission is authorized and accomplished according to an approved night vision goggle (NVG) program.
- 5.13.2.2. Flight test engineers graduating from USAF Test Pilot School or equivalent course may act as safety observers during practice instrument approaches provided initial ground training is completed and semiannual currency is maintained according to AFI 11-202, volume 1, *Aircrew Training*. (HQ AFFSA/XO waiver #95001 expires 31 Oct 2000)
- 5.13.3. Vision restricting devices will not be used for simulated instrument flight unless required in an approved test plan. Observers will:
 - Be pilot qualified in the aircraft flown.
 - Have direct access to the flight controls.
 - Have full view of the flight instruments.
 - Be able to see outside.
- 5.13.3.1. Use of vision restricting devices during takeoffs and landings is approved when the requirements of para 5.13.3 (AFMC) are met.
- 5.14.2.3. Guidance for practicing emergency procedures is contained in Flight Test volumes. The DFO may approve exceptions only when required as part of an approved test plan. Document approval in the test plan or flight authorization.
- **5.14.2.4.**(Added) Helicopter test and practice autorotations are restricted to landing areas where aircraft rescue and firefighting equipment (ARFF) are immediately available.
- **5.14.3.**(Added) The DFO may allow a Federal Aviation Administration (FAA) flight examiner (FE) to observe pilot or flight engineer performance for an airline transport pilot or flight engineer qualification evaluation given as part of an Air Force checkride. The FAA FE will occupy an observer position only. All restrictions of this supplement apply. Field units will retain a copy of the written approval for 2 years.
- **5.14.4.**(Added) Before initiating any simulated emergency, the PIC/IP/EP will brief the cockpit crew on the condition to be simulated and state "simulated" over the interphone communication system prior to accomplishment of each simulated emergency condition or as the simulated condition is established.
- 5.15.2. Touch-and-go landings are authorized when the requirements of paragraph 5.15.3 are met.
- 5.15.3. IPs, EPs, and designated FPs or MPs may perform touch-and-go landings. The PIC must have access to the flight controls and brief the crew on procedures to be followed prior to executing the first touch-and-go landing of a training mission. Refer to AFI 11-202, Vol 1/AFMC supplement for qualifications and restrictions.
- 5.16.1. Parachutist airdrops will be conducted according to AFI 11-410, *Personnel Parachute Operations*. Other airdrops will be conducted under approved test plans or locally developed procedures.
- 5.17.1. Reduced or light-out operations within restricted and warning areas are approved for AFMC aircraft when operational requirements dictate. DFOs will establish policies for such lighting in the unit supplement to this instruction.
- 5.17.1.1. One aircraft in the formation will display appropriate lighting. Others may operate with reduced lighting (this does not authorize lights out) as safety, operational and test conditions permit. Lights out operation is only authorized when executing an approved test plan with the appropriate safety review board procedures adhered to.

- 5.18. Aerobatic maneuvers will not be performed below 5,000 feet AGL. Exception: Flight maneuvers approved according to AFI 11-209, *Air Force Participation in Aerial Events*, as part of an authorized air show.
- 5.21. Units that conduct operations with live armament will publish procedures for live/hung ordnance in the unit supplement to this instruction and/or in-flight guide.
- **5.21.3.(Added)** Aircraft will not be delivered to a contractor facility with hot armament on board unless delivery is specifically required by the contract and approved by the cognizant contract administration office.
- 5.22.2. When mission requirements and crew workload permit, aircrews will file air reports for extended over water flights when actual weather encountered is significantly different from forecast.
- 5.23.1. Missions requiring planned penetration of a thunderstorm require HQ AFMC/DO approval.
- 5.26. Training requirements for NVG operations are specified in AFI 11-202, Vol 1/AFMCS 1.
- **5.28.**(Added) If structural damage occurs or is suspected, the mission will be aborted and a landing will be made as soon as practical, regardless of apparent damage.
- **5.29.**(Added) High Speed Taxi Checks. A high speed taxi check is a maintenance operational check which requires the aircraft to be moving at higher than normal taxi speed. Brake energy limits and cooling must be considered when planning high speed taxi checks. High speed taxi checks, to include barrier certifications, will be accomplished according to an approved test plan or established FCF profile. In the absence of a test plan or FCF profile, these checks will be approved by the DFO and accomplished by a qualified IP or FCF pilot. High-speed taxi checks will be documented on a flight authorization form.
- **5.30.**(Added) Aircraft Operations with Engines or Primary Systems Inoperative. Unless required under an approved test plan, proposed flights with any engine inoperative or primary aircraft system affecting safety of flight completely inoperative require HQ AFMC/DO approval (for example, hydraulic, electrical, fuel, flight control, or flight instruments). Submit requests to HQ AFMC/DOV for coordination.
- 6.2. AFMCI 11-301, AFMC Life Support Program, prescribes wear and use of personal and survival equipment.
- **6.2.1.**(Added) Seat and Safety Belt Requirements. PICs must ensure each occupant over 2 years old has an approved seat equipped with a safety belt. Seat belts must be worn:
 - When an ejection seat is occupied.
 - In the pilot and copilot positions.
 - During each takeoff and landing, except for instructors, FEs, and supervisory personnel performing official flight duties or cockpit observation when wearing the seat belt is impractical.
 DFOs may waive this requirement for other selected crew positions if seat belts interfere with essential crew duties.
- **6.2.1.1.(Added)** Each passenger and crewmember should wear a seat belt during flight to avoid injury in the event of sudden turbulence.
- **6.2.1.3.**(Added) If a shoulder harness is installed, it must be worn with the seat belt during each takeoff and landing. Instructors and FEs need not wear the shoulder harness if it interferes with performing train-

ing duties. DFOs may waive this requirement for other selected crew positions if the shoulder harness interferes with crew duties.

- **6.2.2.(Added) Pressure Suit Flight Requirements.** Fatigue associated with flights in pressure suits and at high cabin altitudes, is very insidious. Fatigue onset during these flight conditions can be accelerated by having less than ideal crew rest prior to flight. The following restrictions apply to high altitude pressure suit flights.
 - The current U-2 pressure suits, S-1031 and S-1034, are effective to zero atmosphere (space) and have no altitude restrictions.
 - Pressure suit flights require a minimum of 1 hour of prebreathing 100 percent oxygen prior to takeoff if flight above FL450 is planned.
 - Pressure suit flying in excess of 6.5 hours in a 24-hour period requires 18 hours recovery time between high flight landing and any subsequent takeoff.
 - No more than two pressure suit flights allowed in a 12-hour period.
 - Maximum high altitude pressure suit sortie hours in any 7-day period is 25 hours.
 - Crew duty day for U-2 high altitude pressure suit flights is 12 hours to include all low altitude or ground duties immediately following landing. This may be waived to 14 hours.
 - Waiver authority is the unit commander. Waiver factors include extent of crew rest prior to flight, quality of crew rest, and pilot qualification and experience. Document waiver in the remarks section of the flight authorization form.
- **6.4.5.1.**(Added) When any occupant of the aircraft lacks functional oxygen equipment, mission planning should consider recovery at a suitable airfield in the event of a loss of cabin pressurization.
- 8.1.1.1. Cat II and Cat III operations are restricted to approved test plans only. Certification will be handled on a case by case basis. Submit requests to HQ AFMC/DOV.
- 8.1.2.1. AFMC crews are authorized to conduct practice instrument approaches under VFR.
 - **8.1.3.**(Added) Military Accepts Responsibility for Separation of Aircraft (MARSA). The unit DFO is authorized to develop agreements for special IFR operations according to the MARSA concept. See FAA Handbook 7610.4, Special Military Operations, and FLIP for further guidance.
 - 8.3.1.1. Approval of Non-DoD/NOAA and Local Use Procedures. Instrument procedures not published in either DoD or NOAA FLIP require a formal TERPS review, followed by AFMC/DO approval. The single point of contact for all requests is the AFMC TERPS office (HQ AFMC/DOA, DSN 986-0060, fax 986-1246). Submit requirements directly to the TERPS office (HQ AFMC/DOA) immediately upon mission notification. Minimum 15 days advance notice is desired. Approval request must include:
 - Airfield name/ICAO.
 - Desired procedure(s).
 - Copy of approach plate (or Jeppesen page number).
 - Mission date.
 - POC and phone number.

Instrument procedures are approved for specific missions, not blanket use. PICs will comply with restrictions and recommendations contained in the TERPS evaluation.

- 8.4.3. Aircraft may hold at a remote or island destination, instead of designating an alternate airport, under the following conditions:
 - There must be enough fuel on board, in addition to required reserves, to hold for at least one hour after arriving at the initial approach fix.
 - From one hour before until two hours after estimated time of arrival, the worst weather is forecast to be at or above the alternate airport weather requirements for filing purposes, and the forecast crosswind component corrected for runway condition reading (RCR) is within the recommended zone of the aircraft's landing crosswind chart.
- 8.6. Command takeoff alternate requirements for tanker/transport/bomber aircraft are listed in table 8.1. For fighter/trainer aircraft, the DFO may authorize takeoff for operational requirements when existing weather is below landing minimums if the visibility is at least 1,600 feet runway visual range (RVR) or 1/4-mile and a suitable alternate is located within 30 minutes flying time. The reported and forecast weather at the alternate must meet alternate airport weather requirements for filing purposes, and the forecast crosswind component corrected for RCR must be within the recommended zone of the aircraft's landing crosswind chart.
- **8.6.3.(Added) Meteorological Condition for Flight.** Accomplish ACF/FCF/T&E flights during day VMC to the greatest extent possible. Each flight test activity will develop and publish ceiling/visibility minima applicable to their particular operation, but in no case less than the following takeoff minimums:
- **8.6.3.1.(Added) T&E Flights Weather Minimums**. As specified in the test plan or local directive.
- **8.6.3.2.**(Added) ACF/FCF Weather Minimums. Accomplish first ACF/FCF and subsequent flights involving discrepancies for engine, flight control, landing gear, or instruments affecting IFR capability, so as to terminate prior to official sunset. Do not perform the first takeoff of an ACF/FCF between official sunset and official sunrise. Preflights for ACF/FCF will be accomplished during daylight hours. All daylight required flight operations must be terminated prior to official sunset. When reflying aircraft for discrepancies involving engines, flight controls, landing gear, or flight instruments affecting IFR capability, use initial ACF/FCF minima. On a case-by-case basis, the DFO may authorize minimums below subsequent ACF/FCF minimum for reflights of discrepancies involving less critical aircraft systems. Document approval on the flight authorization.

Fighter, Observation, U-2 Aircraft:

- Initial ACF/FCF: 3000 feet ceiling and 3 miles visibility.
- Subsequent ACF/FCF: 1500 feet ceiling and 3 miles visibility.

Bomber, Cargo, Tanker, and Training Aircraft:

- Initial ACF/FCF: 1500 feet ceiling and 3 miles visibility.
- Subsequent ACF/FCF: 1000 feet ceiling and 3 miles visibility.

Helicopter:

- 1000 feet ceiling and 3 miles visibility
- 8.13.2. Pilots may continue the approach as published to the missed approach point and may land if the aircraft is in a position to make a safe landing and the runway environment is in sight.

- 8.13.3. For other than Category II/III Instrument Landing System approaches, radar altimeters should be set to HAT/HAA (unless flight manual procedures direct otherwise). However, primary reference for MDA/DH is the barometric altimeter.
- 8.15. The DFO may authorize IFR "VFR on Top" operations according to the provisions of FLIP, General Planning, if specific mission requirements dictate.

Table 8.1.(Added) Departure Alternate Requirements for Tanker/Transport/Bomber Aircraft.

If departure weather is:	A departure alternate is:	
At or above authorized ceiling and visibility landing	Not required.	
minimums.		
Below either authorized ceiling or visibility minimums but		
RVR is 16 or greater (visibility ¼ mile or greater) -OR-		
Below either authorized ceiling or visiblilty minimums but	Required. See notes 1 and 2.	
RVR is 12 or greater at the approach end and 10 or greater		
at the departure end and runway centerline lighting is		
operational. See note 3.		

NOTE 1: Alternate must be located within 30 minutes flight time with weather reported and forecast at or above approach minimums or 200-1/2 (RVR 24), whichever is higher, for 1 hour after takeoff.

-OR-

Alternate must be located within 2 hours flight time with weather forecast to be at least 500-1 above approach minimums but no lower than 700-2 for a precision approach or 800-2 for a non-precision approach for ETA at the alternate + or - one hour.

NOTE 2: Aircraft must be able to maintain minimum en route altitude to the alternate if an engine fails.

NOTE 3: Must have centerline lighting and dual RVR display slave readouts for both approach and departure ends of runway. For runways with triple RVR readouts, the pilot may use any two consecutive readouts to determine if the runway is usable for departure (aircraft performance permitting). For example: Approach end RVR=8, midfield RVR=17, departure end RVR=10. If aircraft performance and runway length will permit taking off at midfield, this runway is usable for takeoff.

- 9.4.5.1. USAF TPS students will not be scheduled for events which would deny them 12 hours of crew rest. However, students may elect to use school facilities (i.e., computers, data reduction equipment and audio-visual equipment) so long as it does not interfere with the opportunity for at least 8 hours of uninterrupted rest during the 12 hours immediately prior to the beginning of the flight duty period.
- 9.4.6.1. Time spent traveling (e.g., as a passenger or in a POV) to or from a TDY location to perform aircrew duties does not count as crew rest.
- 9.9.1. ACF/FCF missions will be rescheduled if unexpected delays prevent completion of all required items within the normal flight duty period (limited to 12 hours for all airframes).
- 9.9.1.1. To minimize risk due to fatigue, supervisors at all levels may further restrict crew duty day for events such as flight test, practice takeoffs, emergency procedures, low level operations, low approaches, or touch-and-go landings.

9.10.1. AFMC DO authorizes unit DFOs to extend the flight duty period, as outlined in this chapter, up to 2 hours. The PIC is not authorized to extend flight duty period. For all other waivers to this chapter forward the request to HQ AFMC/DOV for coordination with AFMC DO.

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